

IN THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

Claim 1 (Previously Presented): A semiconductor device, comprising:

- a) a second MOS transistor, including a portion measured by fluctuation in potential;
- b) a wire having a first end and a second end, the second end being connected with said portion measured; and
- c) an observation part including a pn junction irradiated with a laser beam to detect said fluctuation in potential, wherein:
 - 1) said observation part includes a first MOS transistor having:
 - i) a source/drain region including a first impurity region of a first conductivity type, that is connected with said first end of said wire and that is formed within a second impurity region of a second conductivity type; and
 - ii) a gate electrode that is electrically insulated from a gate electrode of said second MOS transistor; and
 - 2) said pn junction includes said first and second impurity regions.

Claims 2 and 3 (Canceled).

Claim 4 (Currently Amended): A semiconductor device, comprising:

a portion to be measured by fluctuation in potential;
a wire having one end and the other end connected with said portion to be measured;
and
an observation part connected with said one end of said wire,
wherein said observation part includes a pn junction irradiated with a laser beam to
detect said fluctuation in potential, said pn junction includes a first impurity region of a first

conductivity type connected with said one end of said wire and a second impurity region of a second conductivity type, said first impurity region is formed within said second impurity region, said observation part includes a first MOS transistor having said first impurity region as a source/drain region, and The semiconductor device according to claim 3, wherein said first MOS transistor includes a gate electrode set to be the same in potential as said second impurity region.

Claim 5 (Canceled)

Claim 6 (Previously Presented): The semiconductor device according to claim 1, wherein:

said portion measured is said gate electrode of said second MOS transistor.

Claim 7 (Previously Presented): The semiconductor device according to claim 1, wherein:

said portion measured is a source/drain region of said second MOS transistor.

Claim 8 (Currently Amended): The semiconductor device according to claim [5] 1, wherein said portion to be measured is a well region of said second MOS transistor.

Claim 9 (Canceled)

Claim 10 (Currently Amended) A semiconductor device, comprising:
a portion to be measured by fluctuation in potential;
a wire having one end and the other end connected with said portion to be measured;
an observation part connected with said one end of said wire, and
a wire to be measured including said portion to be measured;
wherein said pn junction includes a first impurity region of a first conductivity type
connected with said one end of said wire and a second impurity region of a second
conductivity type, and said observation part includes,

a pn junction irradiated with a laser beam to detect said fluctuation in potential,

~~The semiconductor device according to claim 9, wherein said observation part includes:~~ a third impurity region connected with a second portion to be measured different from said portion to be measured and made conductive with said wire to be measured[;], and

a fourth impurity region having a conductivity type opposite to a conductivity type of said third impurity region.

Claim 11 (Previously Presented): The semiconductor device according to claim 1, wherein:

a) said first conductivity type is an n type and said second conductivity type is a p type;

b) said observation part further includes:

1) a second pn junction having a p-type third impurity region connected with said wire and an n-type fourth impurity region; and

c) a first fixed potential is applied to said second impurity region and a second fixed potential higher than said first fixed potential is applied to said fourth impurity region.

Claim 12 (Original): A method of analyzing the semiconductor device recited in claim 1, comprising the steps of:

(a) irradiating said pn junction with a laser beam; and

(b) measuring light intensity of said laser beam reflected at said pn junction.

Claims 13 and 14 (Canceled)

Claim 15 (Currently Amended): A method of analyzing [the] a semiconductor device [recited in claim 4,] including:

a portion to be measured by fluctuation in potential;

a wire having one end and the other end connected with said portion to be measured;
and

an observation part connected with said one end of said wire,
wherein said observation part includes a pn junction irradiated with a laser beam to
detect said fluctuation in potential, said pn junction includes a first impurity region of a first
conductivity type connected with said one end of said wire and a second impurity region of a
second conductivity type, said first impurity region is formed within said second impurity
region, said observation part includes a first MOS transistor having said first impurity region
as a source/drain region, and said first MOS transistor includes a gate electrode set to be the
same in potential as said second impurity region,

comprising the steps of:

- (a) irradiating said pn junction with a laser beam; and
- (b) measuring light intensity of said laser beam reflected at said pn junction.

Claim 16 (Canceled)

Claim 17 (Original) A method of analyzing the semiconductor device recited in claim 6, comprising the steps of:

- (a) irradiating said pn junction with a laser beam; and
- (b) measuring light intensity of said laser beam reflected at said pn junction.

Claim 18 (Original) A method of analyzing the semiconductor device recited in claim 7, comprising the steps of:

- (a) irradiating said pn junction with a laser beam; and
- (b) measuring light intensity of said laser beam reflected at said pn junction.

Claim 19 (Original) A method of analyzing the semiconductor device recited in claim 8, comprising the steps of:

- (a) irradiating said pn junction with a laser beam; and

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(b) measuring light intensity of said laser beam reflected at said pn junction.

Claim 20 (Canceled):

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in view of the following remarks is respectfully requested.

Claims 1, 4, 6-8, 10-12, 15, and 17-19 are presently active in this case. Claims 4, 8, 10, and 15 have been amended and claims 9, 13, 14, 16, and 20 have been canceled by way of the present amendment.

In the August 19, 2003 Advisory Action, claims 4, 8-10, and 12-20 were indicated as being withdrawn from consideration; and claims 1, 6, 7, and 11 were indicated as being allowable. Applicants acknowledge with appreciation the indication of allowable subject matter.

The Advisory action states regarding the withdrawn claims that “the case would be allowable if the non-elected claims would either be cancelled or rejoined (the latter would, however, require amendment of said non-elected claims, [as] they did not evolve with the elected claims during prosecution.” In response thereto, Applicants have elected to “rejoin” the non-elected claims.

To that end, claims 12, 17, 18, and 19 have been re-presented in their original form. Those claims depend from claims 1, 6, 7, and 8, respectively. Claim 8 has been amended to depend from allowed claim 1. Hence, claims 8, 12, and 17-19 are believed to be in condition for allowance.

Original claims 4, 10, and 15 have been rewritten in independent form. Applicants submit that claims 4, 10, and 15 are neither anticipated nor render obvious by the applied references. Hence, those claims are also believed to be in condition for allowance.

An early and favorable action is respectfully requested.

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Respectfully submitted,

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